

Title (en)

RNA POLYMERASE III PROMOTERS AND METHODS OF USE

Title (de)

RNA-POLYMERASE-III-PROMOTOREN UND VERFAHREN ZUR VERWENDUNG

Title (fr)

PROMOTEURS D'ARN POLYMÉRASE III ET PROCÉDÉS D'UTILISATION

Publication

EP 4352215 A1 20240417 (EN)

Application

EP 22743642 A 20220610

Priority

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- US 2022032940 W 20220610

Abstract (en)

[origin: WO2022261394A1] Compositions and methods useful for expressing an RNA are provided. Compositions comprise nucleic acid molecules comprising an RNA polymerase III promoter and expression constructs comprising the novel promoters operably linked to a coding sequence. The promoters can initiate transcription of RNA-coding nucleotide sequences through the recruitment of RNA polymerase III (pol III) or, in some embodiments, polypeptide-encoding nucleotide sequences through the recruitment of RNA polymerase II. The promoters thus find use in transcribing nucleotide sequences, including but not limited to, those encoding guide RNAs, and polypeptide-encoding sequences. Such expression constructs comprising the novel promoters operably linked to nucleotide sequences encoding guide RNAs find use in binding and/or modifying the sequence of a target nucleic acid molecule, modifying the expression of a target gene, or detecting a target nucleotide sequence in cells comprising an RNA-guided nuclease (RGN) or RNA-guided nucleotide-binding polypeptide (RGNBP).

IPC 8 full level

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CPC (source: EP US)

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